

## ABSTRACT

The present invention provides a gene encoding a fucose transporter, a fucose transporter polypeptide, a method for screening for a compound that binds to a fucose transporter or a compound that inhibits fucose transport activity, a cell having inhibited fucose transporter functions, and a cell wherein the expression of the fucose transporter is inhibited. The present invention further relates to a method for producing recombinant protein, and specifically, to a method for producing protein by which fucose existing within the Golgi apparatus of a host cell is decreased, a method for inhibiting the addition of fucose to protein by which fucose existing within the Golgi apparatus of a host cell is decreased upon production of recombinant protein using the host cell, a method for increasing the cytotoxic activity of an antibody by which an antibody is produced using a cell wherein fucose existing within the Golgi apparatus is decreased, and a cell having a Golgi apparatus wherein fucose existing within the Golgi apparatus is decreased.